

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1-32. (canceled).

33. (previously presented): An expression vector, comprising:

(a) a first coding region encoding a peptidyl-prolyl cis-trans isomerase (PPIase) having molecular chaperone activity, and

(b) a region having at least one restriction enzyme site in which a second coding region encoding a desired protein can be inserted,

wherein the PPIase is archaeobacterial FKBP-type PPIase.

34. (previously presented): The expression vector according to claim 33,

wherein the first coding region is operatively linked to a promoter, and the restriction enzyme site is in the same reading frame as the first coding region, and is downstream of the first coding region.

35. (currently amended): The expression vector according to claim 33 ,

which has a region between the first coding region and the region having at least one restriction enzyme site in which a second coding region can be inserted,

wherein the region encodes a protease digestion site in the same reading frame as
(a) ~~and (b)~~.

36. (currently amended): ~~An~~ The expression vector according to claim 33,
wherein further comprising a second coding region encoding a desired protein ~~is~~
~~inserted into the expression vector according to claim 33.~~

37. (canceled).

38. (withdrawn): The expression vector according to claim 33,
wherein the PPIase having molecular chaperone activity is cyclophilin-type
PPIase.

39. (withdrawn): The expression vector according to claim 33,
wherein the PPIase having molecular chaperone activity is parvulin-type PPIase.

40. (canceled).

41. (previously presented): The expression vector according to claim 33,
wherein the archaeobacterial FKBP-type PPIase is short type FKBP-type PPIase.

42. (previously presented): The expression vector according to claim 33,

wherein the PPIase having molecular chaperone activity comprises an IF domain and/or a C-terminal domain of archaeobacterial FKBP-type PPIase.

43. (withdrawn-currently amended): The expression vector according to claim ~~37~~33, wherein the FKBP-type PPIase is trigger factor-type PPIase.

44. (withdrawn): The expression vector according to claim 33, wherein the PPIase having molecular chaperone activity comprises a N-terminal domain and/or a C-terminal domain of trigger factor-type PPIase.

45. (withdrawn-currently amended): The expression vector according to claim ~~37~~33, wherein the FKBP-type PPIase is FkpA-type PPIase.

46. (withdrawn): The expression vector according to claim 33, wherein the PPIase having molecular chaperone activity comprises a N-terminal domain of FkpA-type PPIase.

47. (withdrawn-currently amended): The expression vector according to claim ~~37~~33, wherein the FKBP-type PPIase is FKBP52-type PPIase.

48. (withdrawn): The expression vector according to claim 33,

wherein the PPIase having molecular chaperone activity comprises a C-terminal domain of FKBP52-type PPIase.

49. (withdrawn): The expression vector according to claim 38,
wherein the cyclophilin-type PPIase is CyP40-type PPIase.

50. (withdrawn): The expression vector according to claim 33,
wherein the PPIase having molecular chaperone activity comprises a C-terminal domain of CyP40-type PPIase.

51. (withdrawn): The expression vector according to claim 39,
wherein the parvulin-type PPIase is SurA-type PPIase.

52. (withdrawn): The expression vector according to claim 33,
wherein the PPIase having molecular chaperone activity comprises a N-terminal domain of SurA-type PPIase.

53. (previously presented): The expression vector according to claim 36,
wherein the second coding region has a nucleotide sequence encoding a monoclonal antibody.

54. (previously presented): The expression vector according to claim 36,

wherein the second coding region has a nucleotide sequence encoding a membrane protein.

55. (currently amended): An isolated host cell~~A host,~~
which contains the expression vector according to claim 33,~~wherein the host is~~
~~selected from the group consisting of a bacterium, a yeast, a fungus, a plant, an insect cell,~~
~~and a mammalian cell.~~

56. (currently amended): The host cell according to claim 55,
which is Escherichia coli.

57. (withdrawn): A fused protein,
which comprises PPIase having molecular chaperone activity and a desired protein.

58. (withdrawn): The fused protein according to claim 57,
which comprises a protease digestion site between PPIase having molecular chaperone activity and a desired protein.

59. (previously presented): A process for producing a fused protein comprising PPIase having molecular chaperone activity and a desired protein,

comprising culturing a host cell transformed with the expression vector of claim 36 to express the fused protein.

60. (previously presented): The process for producing a fused protein according to claim 59,

which comprises culturing the host cell containing the expression vector under conditions suitable for expression of the expression vector to produce the fused protein in a cytoplasm of said host cell.

61. (currently amended): The process for producing a fused protein according to claim 59,

which comprises providing a region being transcribed and translated to be a signal sequence at the 5' terminus of a coding region ~~a 5' terminus of the first coding region or a 3' terminus of the second coding region~~ of the expression vector that encodes the N-terminus of the fused protein, and culturing a host containing the expression vector under conditions suitable for expression of the expression vector to produce the fused protein in a periplasm or a medium of said host cell ~~of expression of the expression vector to express the fused protein in the periplasm or a medium~~.

62. (previously presented): A process for producing a fused protein comprising *in vitro* transcription and translation of the expression vector of claim 36, in a cell-free translation system using a bacteria extract or a eukaryotic extract.

63. (previously presented): The process for producing a fused protein according to claim 59,

wherein the fused protein is adsorbed on a carrier bound to a macrolide, cyclosporine, juglone, or a compound which inhibits PPIase activity, wherein said carrier is recovered and the fused protein is recovered from the carrier.

64. (previously presented): A process for producing a desired protein,

which comprises digesting a fused protein comprising a protease digestion site obtained by the process according to claim 59, with a protease that digests the protease digestion site.